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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/941,151	08/28/2001	Eric Chapoulaud	ORM-156CI	4585
26875	7590	11/12/2004	EXAMINER	
WOOD, HERRON & EVANS, LLP 2700 CAREW TOWER 441 VINE STREET CINCINNATI, OH 45202			BUMGARNER, MELBA N	
			ART UNIT	PAPER NUMBER
			3732	

DATE MAILED: 11/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/941,151

Applicant(s)

CHAPOULAUD ET AL.

Examiner

Melba Bumgarner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 49-62 and 84 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 49-62 and 84 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of applicant's communication of October 18, 2004 and upon further consideration, the final rejection of March 23, 2004 is withdrawn. The amendment filed on October 18, 2004 has been entered and the following is the action on the merits.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 49-57 and 84 are rejected under 35 U.S.C. 102(e) as being anticipated by Chishti et al. (5,975,893). Chishti et al. discloses a method of providing a custom orthodontic appliance for repositioning teeth comprising communicating, from an orthodontic practitioner, three-dimensional information from the mouth of a patient of the shapes of the teeth; displaying, on a computer display for inspection by a person, images of the teeth in suggested tooth positions and orientations that are based on the information; communicating, from the person, feedback information regarding the suggested tooth positions and orientations; providing a custom orthodontic appliance that is configured to urge the teeth, when installed thereon, and that has been manufactured based on the suggested tooth positions and orientations (column 5 line 25 – column 6 line 10, column 6 line 50 – column 7 line 4). As to claim 50, the person is an orthodontic practitioner, and feedback information of changes to the suggested tooth positions and orientations (column 6 line 2-10). As to claims 51, 52, 57 and 84, the method comprises

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providing the person with a computer interface and displaying the images, providing the interface with a capability for the entry by the person of the feedback information, the feedback information includes information of changes to the suggested tooth positions and orientations, redisplaying images of the teeth in tooth positions and orientations revised (column 5 line 49). As to claim 53, the three-dimensional information may be derived from an impression of the teeth from the orthodontic practitioner, and displaying the images of the teeth is in response to data digitized from a model of the teeth made from the impression (column 5 line 41). As to claims 54-56, the method comprises communicating information to a remote computing facility, work station, of the derivation of the suggested tooth positions and orientations, displaying the digital images of the teeth on the computer display, communicating to an orthodontic appliance manufacturing facility having equipment for manufacturing the appliance, data that includes the three-dimensional information and information regarding the tooth positions and orientations, and receiving from the manufacturing facility the appliance for providing the appliance to the orthodontic practitioner (column 14 line 36, column 15 line 1).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 58-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chishti et al. in view of Andreiko et al. (5,368,478). Chishti et al. disclose a method that shows the limitations as described above; however, Chishti et al. do not show establishing digital

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communications link between a computer terminal and a digital computer at a remote location, transferring the information to the remote location, and deriving with the digital computer the suggested tooth positions and orientations. Andreiko et al. teaches establishing digital communications link between a computer terminal and a digital computer at a remote location, transferring the information to the remote location, and deriving with the digital computer the suggested tooth positions and orientations (figure 1, column 22). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Chishti et al. to include the steps of Andreiko et al. in order to allow the orthodontic practitioner to make the diagnosis of the condition of the patient and the treatment and have the analysis and design by such specialists in view of Andreiko et al. Chishti et al. and Andreiko et al. show entering commands accepting tooth positions and orientations at the computer display. Andreiko et al. further shows communicating the commands to the remote location and processing data the digital computer, transmitting data of the appliance designed or redesigned from the remote location, displaying images of the data on the computer display. Andreiko et al. teaches a method of providing custom orthodontic appliance having positioning jigs having surfaces thereon that conform to the shapes of the teeth, locating the jig on the tooth and positioning and bonding the appliance on the tooth (column 6 line 43) so that components of the appliance can be secured to the teeth at the precise position and orientation in view of Andreiko et al.

Response to Arguments

6. Applicant's arguments with respect to the rejected claims have been considered but are moot in view of the new ground(s) of rejection.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melba Bumgarner whose telephone number is 571-272-4709.

The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached at 571-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Melba Bumgarner
Patent Examiner